

ANDRIYASHEV, M.M., inzh.

Assortment of water pipes, fittings, and reinforcements. Vod. 1
san. tekhn. no.10:16-19 0 '64. (MIRA 18:3)

ANDRIYASHEVA, N.M.; BAKKAL, T.P.; BEKKER, S.M.; BOGDANOV-BEREZOVSKIY, V.V.;
BRAUN, A.D.; VASILEVSKAYA, N.L.; GANUSENKO, M.N.; GARMASHEVA, N.L.;
DEMICHEV, I.P.; DRIZGALOVICH, S.Ye.; KALININA, N.A.; KORSAKOVA, G.F.;
KRYZHANOVSKAYA, Ye.F.; MIROVICH, N.I.; PROROKOVA, V.K.; PUGOVISHNI-
KOVA, M.A.; RESHETOVA, L.A.; SVETLOV, P.B.; UTEGONOVA, K.D.; KHECHI-
NASHVILI, G.G.; SHVANG, L.I.; GARMASHEVA, N.L., professor, redaktor;
RUDAKOV, A.V., redaktor; RULEVA, M.S., tekhnicheskiiy redaktor.

[Reflex actions in mother-fetus interrelations] Reflektornye reaktsii
vo vzaimootnosheniakh materinskogo organizma i ploda. [Leningrad]
Gos. izd-vo med. lit-ry, Leningradskoe otd-nie, 1954. 266 p. (MLBA 7:10)
(Pregnancy) (Embryology)

USSR / Human and Animal Physiology. The Action of Physical Factors. T

Abs Jour : Ref Zhur - Biol., No 15, 1958, No. 70666

Author : Andriyashova, N.-M.

Inst : Not given

Title : The Peculiarities of Changes in the Peripheral Blood of Pregnant Animals following Single X-irradiation

Orig Pub : Med. Radiologiya, 1957, Vol 2, No 6, 19-26

Abstract : In non-pregnant rats and pregnant rats, blood was taken by means of excision of the end of the tail. Studies were made of the percentage of Hgb, the leukocyte count, the color index, the number of reticulocytes and erythrocytes, and the differential white cell count. Irradiation was administered in doses of 500 r, at a strength of dose of 33 r/min. In pregnant rats there was a more pronounced and abrupt degree of anemia and intensity of regeneration of blood cells than in the non-pregnant rats. If

Card 1/2

ANDRIYASHEVA, N.M.

~~Effect of roentgen irradiation of pregnant animals on the morpho-~~
logical properties of the blood of their progeny. Med.rad. 4 no.11:
42-47 N '59. (MIRA 13:2)

1. Iz kliniko-dagnosticheskoy laboratorii (zaveduyushchiy -- kand.
med.nauk N.L. Vasilevskaya) Instituta akusherstva i ginekologii AMN
SSSR.

(RADIATION EFFECTS experimental)
(FETUS radiation effects)
(PREGNANCY physiol.)

ANDRIYASHEVA, O.M.; PAKHLAVUNI, A.V.; SHOLOMOVICH, T.G.; AKULOVA, L.D.;
USPENSKAYA, N.A.; YERMAKOV, M.S., tekhn.red.

[German-Russian dictionary of physics] Nemetsko-russkiy slovar'
po fizike. Sost. O.M.Andriiasheva i dr. Moskva, Izd-vo Mosk.
univ., 1959. 507 p. (MIRA 13:1)

(German language--Dictionaries--Russian)
(Physics--Dictionaries)

ANDRIYASHKIN, V.

For the Great Chemistry. Stroi.truboprov. 9 no. 11, N '64.
(MIRA 18:2)

ANDRIYASHKIN, V.M., inzh.

Using moving scaffolding when painting tanks. Stroi.
truboprov. 7 no.10:21 0 '62. (MIRA 15:11)
(Scaffolding)
(Tanks—Painting)

WORTYANSKI, I. B.

"The Problem of the Types of Higher Nervous Activity of Horses." Cand
Biol Sci, Moscow Veterinary Academy, Moscow, 1953. (RZhBiol, No 4, Feb 55)

SO: Sum. No. 631, 26 Aug 55 - Survey of Scientific and Technical Dissertations
Defended at USSR Higher Educational Institutions (14)

USSR / Human and Animal Physiology. Nervous System.

T-10

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 3879

Author : Andriyavskas, L. B.

Inst : AS USSR

Title : Pertaining to the Problem of Higher Nervous Activity
in Horses

Orig Pub : V sb.: Vopr. fiziol. s.-kh. zhivotnykh. M. L., AN SSSR,
1957, 64-70

Abstract : No abstract given

Card 1/1

97

USSR / Human and Animal Physiology. Nervous System.

T-10

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 3878

Author : Andriyauskas, L. R.
Inst : Moscow Academy of Veterinary Medicine
Title : Pertaining to the Problem of Types of Higher Nervous Activity in Horses

Orig Pub : Tr. Mosk. vet. akad., 1957, 20, 19-25

Abstract : The different rate of formation of conditioned defense-motor reactions in horses was studied; prolongation to 5 minutes of the action of differentiation was tested; alternation of the signal meaning for a pair of stimulants was examined; a stimulus of considerable physical strength was applied. Experimental investigations on 9 horses were supplemented by study of external behavior in 49 more animals. The results obtained allowed the animals to be classified as being of 3 types of higher nervous

Card 1/2

ANDRIYUSKAYTE, Ye. M. Cand Agr Sci -- (diss) "Effect of drainage upon the physical properties and yield of soils ~~with~~ various mechanical compositions." Kaunas, 1958. 26 pp with graphs (Min of Agr USSR. Lithuanian Agr Acad), 130 copies (KL, 52-58, 104)

ANDRIYAUSKAYTE, Ye. [Andrijauskaite, E.]

Effect of drainage on hydrophysical properties of clay and loamy
soils. Pochvovedenie no.3:89-95 Mr '61. (MIRA 14:3)

1. Litovskiy nauchno-issledovatel'skiy institut gidrotekhniki
i melioratsii.

(Drainage)

(Soil physics)

ANDRIYUSKAYTE, Ye. [Andrijauskaite, E.] (g.Kaunas)

Tile drainage in Lithuania. Gidr.i mel. 13 no.7:40-43 J1 '61.
(MIRA 14:7)

(Lithuania--Drainage)

USSR / General Problems of Pathology. Immunity.

U

Abs Jour : Ref. Zhur - Biologiya, No. 3, 1959, 13448

Author : Andriychenko, V. I.

Inst : -

Title : On the Influence of Hypothermia on the Changes of Opsonophagocytic Reactions in the Blood of Animals After Vaccination and on the Ability to Produce Agglutinins.

Orig Pub : Fiziol. zh., 1957, 3, No. 6, 83-90

Abstract : The influence of hypothermia on the immunization process was investigated in rabbits, guinea pigs and mice which were vaccinated with a live or killed culture of *Bacterium prodigiosum* (BP) or typhoid vaccine. After narcotization with ether, the animals were covered with ice through an

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USSR / General Problems of Pathology. Immunity.

U

Abs Jour : Ref. Zhur - Biologiya, No. 3, 1959, 13448

oilcloth and left in this position with a rectal T° of $20-21^{\circ}$ for 2-4 hours. The opsonophagocytic index (OI), phagocytic number (PN) and the titer of agglutinins (TA) in previously immunized and control animals did not change during cooling or in the course of 3 days after it. After intravenous introduction of a live culture of BP to cooled rabbits, a considerable number of animals perished during the posthypothermic period with the appearance of bacteremia, at a time when in many uncooled control rabbits 24 hours later, bacteria were no longer found in the blood. OI and PN did not significantly differ at various times after vaccination in experimental and control animals. With vaccination of cooled animals with dead cultures,

Card 2/3

USSR / General Problems of Pathology. Immunity.

U

Abs Jour : Ref. Zhur. - Biologiya, No. 3, 1959, 13448

the agglutinin production was inhibited. But with vaccination with a live culture, the TA in experimental animals was higher than in control animals. With vaccination of animals immediately after cooling or in the beginning of the posthypothermic period, the formation of agglutinins was inhibited, regardless of whether the vaccination was performed with live or killed culture.
-- M. A. Gruzman

Card 3/3

SAL'NIKOV, M.Ye. [Sal'nykov, M.IE.], kand. biol. nauk, otv. red.;
ANDRIYCHUK, M.D. [Andriichuk, M.D.], red.; BEREZOVSKAYA, D.N.
[Berezovska, D.N.], tekhn. red.

[Problems of putrefaction in the bodies of water of the
Dnieper basin] Pytannia biologichnoi saprobnosti vodoin
baseinu Dnipra. Kyiv, Vyd-vo AN URSR, 1963. 45 p.

(MIRA 16:10)

1. Akademiya nauk URSR, Kiev. Instytut hidrobiologii.

(PUTREFACTION)

(DNIEPER VALLEY--WATER--MICROBIOLOGY)

PASTERNAK, S.I., kand. geol.-miner. nauk, otv. red.; ZDUN, V.I.,
doktor biol. nauk, red.; MALINOVSKIY, K.A.
[Malynovs'kyi, K.A.], kand. biol. nauk, red.; CHERKASHCHENKO,
M.I., kand. geol. nauk, red.; TISHCHENKO, M.N. [Tyshchenko,
M.N.], red.; ANDRIYCHUK, M.D. [Andriichuk, M.D.], red.;
MATVIYCHUK, O.O. [Matviichuk, O.O.], tekhn. red.

[Present and past fauna in the western provinces of the
Ukraine] Suchasna ta mynula fauna zakhidnykh oblastei Ukrainy.
Kyiv, Vyd-vo AN URSR, 1963. 92 p. (MIRA 17:2)

1. Akademiya nauk USSR, Kiev. Naukovo-pryrodoznavchyi muzej.

SAL'NIKOV, M.IE.[Sal'nykov, M.IE.], kand. biol. nauk, otv. red.;
ANDRIYCHUK, M.D.[Andriichuk, M.D.], red.; TURBANOVA,
N.A., tekhn. red.

[Problems of the ecology and cenology of the aquatic
organisms of the Dnieper River] Pytannia ekologii i tse-
nolologii vodnykh organizmiv Dnipra. Kyiv, Vyd-vo AN
Ukr. RSR, 1963. 40 p. (MIRA 16:11)

1. Akademiya nauk URSR. Kiev. Instytut hidrobiologii.
(Dnieper River--Hydrobiology)

VLASYUK, P.A., akademik, otv. red.; OKANENKO, A.S., doktor biol. nauk, red.; MANORIK, A.V., kand. biol. nauk, red.; KALININ, F.L., doktor biol. nauk, red.; PROTSENKO, D.F., doktor biol. nauk, red.; SIROCHENKO, I.A., doktor sel'khoz. nauk, red.; KAPITANCHUK, V.A., red.; ANDRIYCHUK, M.D. red.

[Photosynthesis and crop yields] Fotosintez i produktivnost' rastenii. Kiev, Naukova dumka, 1965. 280 p.

(MIRA 18:6)

1. Akademiya nauk URSR, Kiev. Instytut fiziologii roslyn ta agrokhimii.

MAZURMOVICH, B.N., otv. red.; BOSHKO, G.V., red.; GUSHCHA, G.I.,
red.; SMORGORZHEVSKAYA, L.A., red.; FEDORENKO, I.A.,
red.; ANDRIYCHUK, M.D., red.; KAS'YAN, S.N., red.

[Parasites and parasitoses in man and animals] Parazity
i parazitozy cheloveka i zhiivotnykh. Kiev, Naukova dumka,
1965. 411 p. (MIRA 18:9)

1. Akademiya nauk URSR, Kiev. 2. Kiyevskiy gosudarstvennyy
universitet (for Mazurmovich). 3. Institut zoologii AN Ukr.SSR
(for Boshko).

MARKEVICH, Aleksandr Prokof'yevich [Markevyeh, O.P.]; ANDRIYCHUK,
M.D., red.; DAKHNO, Yu.B., tekhn. red.

[Phylogeny in the animal kingdom] Filogeniia tvarynnoho
svitu. Kyiv, Vyd-vo AN URSR, 1964. 197 p.
(MIRA 17:3)

TSEYEB, Ya.Ya.; ROLL, Ya.V.[deceased]; ZEROV, K.K.; VLADIMIROVA, K.S.
[Vladymyrova, K.S.]; OLIVARI, G.A.[Olivari, H.A.]; GURVICH,
V.V.; BIRGER, T.I.[Birher, T.I.]; MALYAREVSKAYA, O.Ya.
[Maliarevs'ka, O.IA.]; CHORNOGORENKO, M.I.[Chernohorenko,
M.I.]; LITVINOVA, M.O.[Lytvynova, M.O.]; ANDRIYCHUK, M.D.,
red.

[Kakhovka Reservoir; a hydrobiological outline] Kakhovs'ke
vodoimyshe; hidrobiologichnyi narys. Kyiv, Naukova dumka,
1964. 303 p. (MIRA 17:8)

1. Akademiya nauk URSR, Kiev. Instytut hidrobiologii.

TOPACHEVSKIY, Vadim Aleksandrovich; ANDRIYCHUK, M.D., red.

[Insectivora and Rodentia of the Nogaysk Late Pliocene
fauna] Nasekomiadnye i gryzuny nogaiskoi pozdneple-
tsenovoi fauny. Kiev, Naukova dumka, 1965. 162 p.
(MIRA 18:5)

ANDRIYCHUK, N., inzh.

Utilization of heat resources. Nauka i pered. op. v sel'khoz.
9 no.2:62-63 F '59. (MIRA 12:3)
(Waste heat)

RYABININ, D.D.; ANDRIYCHUK, V.D.; POLIV'YANIY, A.P. [Polyv'iany, A.P.]

Design of mixers for plastics. Khim.prom. [Ukr.] no.1:80-82
Ja-Mr '64. (MIRA 17:3)

RYABININ, D.D.; ANDRIYCHUK, V.D.; POLYVYANYI, A.P. [Polyv'iany?, A.P.]

System for insulation coating of wires. Khim. prom. no.4:
24-27 O.D '64. (MIRA 1815)

ANDRIYCHUK-RYABOKON', M.A.[Andriichuk-Riabokin', M.A.]

Utilizing waste heat. Mekh. sil'.hosp. 9 no. 6:9 Je '58.

(MIRA 11:7)

1. Starshiy inzhener Cherkas'kogo oblastnogo upravlinnya sil's'kogo
gospodarstva.

(Waste heat)

RUBIN, S., doktor sel'skokhozyaystvennykh nauk; ANDRIYENKO, A., kand.
sel'skokhozyaystvennykh nauk

Long experience in fruit culture. Nauka i pered. op. v
sel'khoz. 8 no.9:39-41 S '58. (MIRA 11:10)
(Fruit culture)

RASSADKIN, I. (Moskva); RAKITYANSKIY, V. (Moskva); YEROSHKIN, V. (Moskva);
KONCHAYEV, B. (Leningrad); PARADA, V. (Uzbekskaya SSR);
YADRENNIKOV, G. (Kurganskaya obl.); KRYLOV, Ye., (Temir-Tau);
PAN'KO (Krasnoyarsk); BALASHOV, V. (Komsomol'sk-na-Amure);
PAVLENKO, S. (Rubtsovsk); TOKOYEV, N. (Kirgizskaya SSR);
ANDRIYENKO, A. (Perm'); TEREKHOV (Tula); KAZAKOV, M. (Baku);
TALBAYEV (Aktyubinskaya obl.); KOPEVA, T. (Khar'kov); CHERKASHIN,
I. (Izhevsk); BEZDETOK, V. (Alma-Ata); BURKOV (Kurganskaya obl.);
KARPOV A. (Krasnodar); BOGDANOV (Ivanovo); SOZINOV, M. (Gor'kiy)

Is there a need for external fire escape stairs? Pozh.delo

8 no.7:26-27 J1 '62.

(MIRA 15:8)

(Fire escapes)

NOVOZHILOV, M.G., prof., doktor tekhn. nauk; SEIYANIN, V.G.; TARTAKOVSKIY, B.N.; Prinimali uchastiye: PCHELKIN, G.D., inzh.; ESKIN, V.S., inzh.; SHARKOV, A.M., kand. tekhn. nauk; BORISYUK, R.F., inzh.; ABDUFATTAKHOV, A.A., inzh.; ANDRIYENKO, A.F., inzh.; KTIITOROV, P.M., inzh.; GLUSKIN, L.I., inzh.; LEVCHENKO, N.K., inzh.; GAVRIIYUK, I.I., inzh.; SHPEKTOROV, Yu.Z., inzh.; KOCHERGA, N.T., red.; GORKAVENKO, L.I., tekhn. red.

[New technical methods and equipment in open-pit mining of mineral deposits] Novaia tekhnologiya otkrytoi razrabotki mestorozhdenii poleznykh iskopaemykh. Pod obshchei red. M.G.Novozhilova. Kiev, Gos.izd-vo tekhn. lit-ry USSR, 1961. 205 p.
(MIRA 15:5)

(Strip mining)

"APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R000101420013-9

APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R000101420013-9"

in A. P. Andrienko, 5. 1.
ANDREYENKO, A.P., kapitan 3-go rango

"Course in navigation." Vol. 4 by E.G.Glinkov. Reviewed by
A.P.Andrienko. Mor.sbor. 46 no.5:94-96 My '63. (MIRA 16:4)
(Navigation--Study and teaching)
(Glinkov, E.G.)

ANDRIYENKO, A. S., Cand Agr Sci --- (diss) "Effectiveness of Various Systems of Maintenance of Soil in Fruit-Bearing Gardens under ~~the~~ Conditions of ^{the} Southwestern Forest-Steppe ~~Areas~~ of the Ukrainian SSR." Michurinsk, 1956. 28 pp (Min of Higher Education USSR, Fruit and Vegetable Inst im I. V. Michurin), 100 copies (KL, 50-57, 119)

- 22 -

Country	: USSR	M
Category	: CULTIVATED PLANTS. FRUITS. Berries.	
Abs. Jour.	: REF ZHUR-BIOL., 21, 1958, NO. 96121	
Author	: Rubin, S.S.; Andriyenko, A.S.	
Institut.	: --	
Title	: Better Soil Conditioning in Fruit Orchards	
Orig. Pub.	: Sadovodstvo, vinogradarstvo i vinodeliye, Moldavi, 1957, No. 6, 19-22	
Abstract	: A study has been made at Uman' Agricultural Institute ever since 1931 on the effectiveness of various systems of keeping the soil in an apple orchard (Pepinka Litovskaya grafted on a forest variety). The trees grow and bear fruit best when the rows between them are kept fallow and when one combines fallow tillage in the first half of summer with the planting of summer siderate crops (peas, buckwheat, mustard, etc.) during the latter half of summer and plowing these in during autumn of the following year. Intercropping	
Card:	1/2	

ACC NR: AT6006205

SOURCE CODE: UR/0000/65/000/000/0003/0016

AUTHOR: Andriyenko, A. Ya.

ORG: none

TITLE: A method of assigning perturbations during an investigation of the statistical accuracy of nonlinear control systems

SOURCE: AN SSSR. Institut avtomatiki i telemekhaniki. Tekhnicheskaya kibernetika (Technical cybernetics). Moscow, Izd-vo Nauka, 1965, 3-16

TOPIC TAGS: automatic control theory, nonlinear control system, statistic analysis, Monte Carlo method, perturbation, algorithm

ABSTRACT: The principal engineering method in the investigation of the statistical accuracy of nonlinear systems is the Monte-Carlo method. Sometimes, due to practical limitations in the bulk of computing operations (even with the use of digital computers), the results are not sufficiently accurate. The method proposed by the present author is applicable to the investigation of the statistical accuracy of an extremely broad class of systems and produces accurate results. The proposed method of assigning perturbations in the analysis of the probabilistic accuracy of nonlinear automatic control systems provides for adjusting individual moments of the perturbations obtained to initial moments. As an example in the realization of this method on a digital computer, the author develops an algorithm of a generator of numbers, used in obtaining the perturbations, for the case when the prescribed moments are exactly matched by the natural moments of the selections

Card 1/2

Card 2/2 LC

STEKLOF, M.L., inzh.; ANDRIYENKO, B.K., inzh.

New design of the rotor wheel of a hydraulic adjustable blade turbine. Energomashinostroenie 7 no.5:41-43 My '61.

(MIRA 14:8)

(Hydraulic turbines)

ANDRIYENKO, D.A.; CHIRYAYEV, A.G.

Parallactic photography of polar lights in the Tiksi Bay region.
Geomag. i aer. 3 no.6:1135-1136 N-D '63. (MIRA 16:12)

1. Kiyevskiy gosudarstvennyy universitet i Institut
kosmofizicheskikh issledovaniy i aeronomii Yakutskogo filiala
Sibirskogo otdeleniya AN SSSR.

L 29121-66 EXT(1)/ECC GN
ACC NR: AP6018867

SOURCE CODE: UR/0203/65/005/005/0878/0883

AUTHOR: Andriyenko, D. A.

ORG: Kiev State University (Kiyevskiy gosudarstvennyy universitet)

TITLE: Results of determination of auroral heights from observations at Tiksi Bay in 1964

SOURCE: Geomagnetizm i aeronomiya, v. 5, no. 5, 1965, 878-883

TOPIC TAGS: aurora, camera/NAFA-30-25 camera

ABSTRACT: Parallaxotic surveys of auroras were made at Tiksi in January March 1964 using broad-format NAFA-30/25 cameras. More than 300 pairs of photographs of different auroral forms were obtained. The curves of the distribution of heights of the lower edge of homogeneous arcs and rayed forms were found to have three peaks. The existence of a shore effect in auroral heights was confirmed. There is a gradual decrease of auroral height near the shore and over shoals. This effect should be observed over islands, river deltas and other regions characterized by an abrupt change of the underlying surface. Also given are the results of determinations of the height of the upper edge, the vertical extent of homogeneous arcs and bands and the extent of rays in a corona. The author thanks Yu. K. Korneyev and V. V. Smeshkov for help in obtaining observational materials. Orig. art. has: 3 figures and 3 tables. /JPRS/

SUB CODE: 04, 14 / SUBM DATE: 14Nov64 / ORIG REF: 006 / OTH REF: 005

Card 1/1

UDC: 551.594.5

ANDRIYENKO, D.A.

Determining the altitude of polar lights from base photographs
taken at Tiksi - Muostakh. Geomag. 1 aer. 3 no.4:762-764 '63.
(MIRA 16:11)

1. Kiyevskiy gosudarstvennyy universitet.

ANDRIYENKO, D.A.

Determining the latitude of the Kiev Astronomical Observatory.
Astron.tsir'. no.172:12-13 Ag '56. (MIRA 10:1)

1. Kafedra astronomii Kiyevskogo gosudarstvennogo universiteta
imeni T.G.Shevchenko.
(Kiev--Latitude)

ANDRIYENKO, D.A.

Results of determining the height of auroras from large-size
photographs taken at Tiksi Bay. Geomag. i aer. 5 no.3:450-459
My-Je '65. (MIRA 18:5)

1. Kiyevskiy gosudarstvennyy universitet.

ANDRIYENKO, D.A.

Determining the altitudes of homogeneous arcs and bands of
auroras in Tiksi Bay. Geofiz. i astron. no.8:35-39 '65.
(MIRA 19:1)

1. Kiyevskiy gosudarstvennyy universitet.

L 11195-66 BWT(1)/FCC

OW

ACC NR: AP6002752

SOURCE CODE: UR/0203/65/005/006/1068/1070

AUTHOR: Andriyenko, D. A.

ORG: Kiev State University (Kiyevskiy gosudarstvennyy universitet)

TITLE: Some characteristics of the distribution of aurorae polares with respect to altitude

SOURCE: Geomagnetizm i aeronomiya, v. 5, no. 6, 1965, 1068-1070

TOPIC TAGS: aurora, atmospheric electric phenomenon

ABSTRACT: The author studies the altitudes of the lower edge of polar aurorae as a function of their intensity, as well as the effect of atmospheric influx on the distribution of polar aurorae with respect to altitudes. Curves are given showing the vertical distribution of altitudes for the lower edge of uniform arcs and bands as well as for radial forms of aurorae in various intensity groups. Analysis of these curves shows that the average altitudes of the lower edge for all forms of aurorae decreases as the intensity increases. A table is given showing the average values of the altitudes for the lower edge of all forms of polar aurorae as a function of

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UDC: 550.388.8

L 11195-66

ACC NR: AP6002752

their intensity, and also the intensity in relative units for each intensity group. It is found that the lower boundary of brighter polar aurorae penetrates deeper into the atmosphere than that of weak aurorae. Data on the effect which atmospheric influxes have on the altitude of aurorae polares are contradictory, and more material is needed for a definite conclusion. Orig. art. has: 4 figures, 1 table.

SUB CODE: 08/ SUBM DATE: 28Dec64/ ORIG REF: 004/ OTH REF: 011

Card 2/2

ACC NR: AR6020766

SOURCE CODE: UR/0269/66/000/003/0065/0065

AUTHOR: Andriyenko, D. O.

TITLE: Littoral effect acting on the altitudes of the aurora polaris

SOURCE: Ref. zh. Astronomiya, Abs. 3.51.552

REF SOURCE: Visnyk Kyivsk'k. un-tu. Ser. astron., no. 6, 1964, 46-47

TOPIC TAGS: aurora, topography

ABSTRACT: The effect of the littoral on the altitudes of the aurora polaris was detected by an analysis of the results of determining the altitudes of the lower edges for similar arcs and bands. The altitude of points along the arc were determined, the distances of these points from the coastal line were found, and the dependence of the altitude on the distance of each point from the coastal line was plotted. The arcs were separated into two groups according to the altitude. It was found that the altitudes of the points along the lower edges increased monotonically over the sea for arcs of the first group, the altitude of which was less than 110 km. This was not observed for the arcs of the second group (altitude > 110 km). It was assumed that the arcs of the first group and the brightest arcs were the ones most frequently subjected to the effect of the littoral during changes in geographic position. Bibliography of 5 titles

[Translation of abstract]

SUB CODE: 04

Card 1/1

UDC: 551.594.5

31983
S/142/61/004/004/018
E192/E382

9.2520 (1150, 1154, 1161)

AUTHOR: Andriyenko, E.N.

TITLE: Design of the circuits with series-connected transistors

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,
Radiotekhnika, v. 4, no. 4, 1961, pp. 418 - 424

TEXT: An increase in the output voltage or power of a semiconductor circuit can be achieved by connecting a number of transistors in series. A system of this type is shown in Fig. 1. For the purpose of analysis a transistor in this system can be regarded as a linear quadripole. It is also assumed that the system operates at frequencies much lower than the cut-off frequencies of the transistors. Analysis of the system can be based on the linear theory of 2n-poles (Ref. 5 - E.V. Zelyakh - Principles of the general theory of linear electrical circuits, pub. by AS USSR, 1951), whose equation in the matrix form is as follows:

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Design of the circuits

31983
S/142/61/004/004/018
E192/E382

$$\begin{pmatrix} u_1 \\ u_2 \\ u_3 \\ \dots \\ u_m \\ u_n \end{pmatrix} = \begin{pmatrix} r'_{11} & 0 & 0 & \dots & 0 & r'_{1n} \\ 0 & r''_{11} & 0 & \dots & 0 & r''_{1n} \\ 0 & 0 & r'''_{11} & \dots & 0 & r'''_{1n} \\ \dots & \dots & \dots & \dots & \dots & \dots \\ 0 & 0 & 0 & \dots & r^{(m)}_{11} & r^{(m)}_{1n} \\ r'_{n1} & r''_{n1} & r'''_{n1} & \dots & r^{(m)}_{n1} & \sum_{(m)=n} r_{n1} \end{pmatrix} \begin{pmatrix} i_1 \\ i_2 \\ i_3 \\ \dots \\ i_m \\ i_n \end{pmatrix} \quad (1)$$

where the r -parameters represent the equivalent parameters of the transistors. The superscript of each element of Eq. (1) denotes the number of each successive series-connected quadripole. The currents in each pair of poles of the system are given by:

$$i_k = \frac{\sum_{l=1}^{l=n} M_{lk} \cdot u_l}{\Delta} \quad (2)$$

Card 2/6

Design of the circuits

³¹⁹⁸³
S/142/61/004/004/018
E192/E382

where $k = 1, 2, 3 \dots n$,

Δ is the determinant of the matrix of Eq. (1), and
 M_{ik} is the minor of the matrix element relating to
the i -th row and k -th column.

The voltage-amplification of the system with respect to any
input is expressed by:

$$K_{uk} = i_n R_H / u_k$$

where R_H is the common load of the system. The input
resistance of the system at a given input is equal to u_k / i_k
and its power-amplification is:

$$K_{pk} = K_{uk}^2 \frac{R_{ik}}{R_H}$$

where R_{ik} is the input resistance. The output resistance

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31983

S/142/61/004/004/004/018

E192/E382

Design of the circuits

of the system is equal to the sum of all the output resistances of the individual transistors. In order to preserve the normal operating conditions for the individual transistors, the load R_H and the supply voltage E should be chosen so that: H

$$R_H = m \cdot r_H, \quad E = m \cdot E'$$

where r_H is the optimum load for a single transistor, and

E' is the supply voltage for an individual transistor.

The above equations are employed to analyse the operation of a two-transistor circuit operating in common-emitter connection; two input signals are applied to the base circuits of the transistors and the output signal is taken across the common load. Analysis of this circuit shows that in order to increase the voltage and power developed in the load, use of a series-connected system is quite feasible. However, it is recommended that transistors having equal values of $R_1 = r_{22}$ and

Card 4/65

ANDRIYENKO, G.A.

~~ANDRIYENKO, G.A.~~
Surgical treatment of ulcers induced with X rays. Khirurgiia no.5:
66-67 My '56. (MLRA 9:9)

1. Iz khirurgicheskogo otdeleniya (zav. G.A.Andriyenko) 2-y
bol'nitsy Dneprodzershinska (glavnyy vrach V.M.Timofeyeva)
(ULCER, etiology and pathogenesis,
x-rays, surg. (Rus))
(ROENTGEN RAYS, injurious effects,
ulcers, surg. (Rus))

ANDRIYENKO, NO. 140

Surgery for nonhealing trophic ulcers of the leg in older persons.
Nov.khir.arkh. no.6:80 N-D '57. (MIRA 11:3)

1. Khirurgicheskoye otdeleniye 2-y Dneprodzerzhinskoy gorodskoy
bol'nitsy)
(LEG--ULCERS)

ANDRIYENKO, G.A.

Case of a cyst of the vermiform appendix. Nov. khir. arkh. no.2:135
Mr-Apr '59. (MIRA 12:7)

1. Khirurgicheskoye otdeleniye 2-y gorodskoy bol'nitsy Dneprodzerzhinska.
(APPENDIZ(ANATOMY)--TUMORS)

ANDRIYENKO, G. I.

Andriyenko, G. I. -- "The Use of Pot Seedlings for Growing Cucumbers in Open and Heated Soils of the Forest Steppe Region of the Ukrainian SSR." Min Higher Education Ukrainian SSR. Khar'kov Order of Labor Red Banner Agricultural Instituti V. V. Dokuchayev. Khar'kov, 1956. (Dissertation For the Degree of Candidate in Agricultural Sciences).

So: Knizhnaya Letopis', No. 11, 1956, pp 103-114

SOV/137-57-1-765

Translation from: Referativnyy zhurnal. Metallurgiya, 1957, Nr 1, p 98 (USSR)

AUTHOR: Andriyenko, K.A.

TITLE: Improvement of Casting Surface (Uluchsheniye poverkhnosti otlivok)

PERIODICAL: V sb.: Opyt proiz-va otlivok. Khar'kov, Oblizdat, 1955, pp 165-168

ABSTRACT: In the manufacture of consumer goods (flat irons, meat grinders, etc.) native fine sands with 92.5% 140- and 200-screen oversize were used. These sands quarried at the Novaya Vodolaga station (near Khar'kov) contains (in %): clayey substances 0.30, SiO₂ 96-97, CaO 1.2, MgO 0.36-0.75, Fe₂O₃ 0.8, and Al₂O₃ 0.88-0.92. "P", "4GU" and "ZIS" binding additives are used in the preparation of core mixtures. The latter produces the best results in surface and overall strength. The quality of the casting surface is good.

Ya. M.

Card 1/1

RIDNYI, A.A.; OSIPOVA, N.A.; ANDRIYENKO, K.A.

Introduction of the KO oil-free binder. Lit. proizv. no.2:
43-44 F '65. (MIRA 18:6)

ANDRIYENKO, L.

~~In the struggle to solve the problem of overtaking the U.S. in the per capita production of meat, milk, and butter. Vop. ekon. no.2: 3-15 F '58.~~ (MIRA 11:3)

1. Zaveduyushchiy Sel'skokhozyaystvennym otdelom Tsentral'nogo komiteta Kommunisticheskoy partii Ukrainy.
(Ukraine--Stock and stockbreeding)

ANDRIYENKO, L.A.

Conditions of the development of stable easterly gales on the Black
Sea (cold season). Trudy OGMI no.21:53-64 '60. (MIRA 14:10)
(Black Sea--Storms)

ANDRIYENKO, Leonid Vasil'yevich [Andriienko, L.V.]; KOSENKO, P.F., red.;
TUBOLEVA, M.V. [Tubolleva], red.

[For the further development of the collective-farm system]
Za dal'shyi raskvit kolhospnoho ladu. Kyiv, 1958. 47 p.
(Tovarystvo dlia poshyrennia politychnykh i naukovykh znan'
Ukrains'koi RSR. Ser.3, no.17) (MIRA 12:3)
(Collective farms) (Machine-tractor station)

ANDRIYFENKO, Leonid Vasil'yevich[Andriienko, L.V.]; BAUR-SHTEYN,
V.Ye., red.

[General trend; the ways for agricultural intensification] General'nyi napriam; shliakhy intensifikatsii
sil's'koho hospodarstva. Kyiv, Politydyav Ukrainy, 1964.
107 p. (MIRA 18:1)

ANDRIYENKO, L.V. [Andriienko, L.V.]

To the new frontiers. Nauka i zhyttia 10 no.3:30-33 Mr '60.
(MIRA 14:8)

1. Zaveduyushchiy sel'skokhozyaystvennym otdelom TSentral'nogo
komiteta Kommunisticheskoy partii Ukrainy.
(Ukraine--Farm mechanization)

ANDRIYENKO, L.V. [Andriienko, L.V.]

Patroitic pledges. Nauka i zhyttia 11 no.7:23-26 J1 '61.

(MIRA 14:8)

1. Zaveduyushchiy sel'skokhozyaystvennyym otdelom TSentral'nogo
komiteta Kommunisticheskoy partii Ukrainy.
(Ukraine--Agriculture)

LACHKOV, G.M., inzh.; ANDRIYENKO, M.Z., inzh.

Device for the proportional load distribution between generators
operating in parallel and frequency holding. Biul. tekhn.-ekon.-
inform. Tekh. upr. Min. mor. flota 7 no.5:57-67 '62. (MIRA 16:3)
(Electricity on ships) (Electric generators)

ANDREYENKO, N.M., inzh.; ELICUSOVA, M.S., inzh.; LINNIKOV, I.K., inzh.

Using synthetic diamonds at the Denproptetrovsk Press Plant.
Machine number no. 5412-15 S.O '65. (MIRA 18:9)

ANDRIYENKO, N.T., inzhener (Noril'sk, Krasnoyarskogo kraya)

~~The engineer's bill to the physician. Zdorov'e 3 no.8:5-6 Ag '57.~~
(HYGIENE) (MLRA 10:9)

ANDRIYENKO, P.F., inzh.

Self-propelled drilling unit. Gor. zhur. no.9:68 S '63.
(MIRA 16:10)

1. Priisk im. Bilibina, Magadanskaya obl.

ANDRIYENKO, S.A., polkovnik komandir artilleriyskogo polka.

High-level personal training of officers warrants the success of
combat and political training. Artill. zhur. no.2:31-35 F '58.
(Military education) (MIRA 11:3)

ANDRIYENKO, Stepan Anisimovich; SOKOLOV, I.A., polkovnik, red.;
MEDCHIKOVA, A.N., tekhn. red.

[Work of the computer in the artillery] Rabota vychislitelia
v artillerii. Moskva, Voenizdat, 1962. 71 p. (MIRA 16:4)
(Artillery--Problems, exercises, etc.)
(Position finders)

GOLIK, A.Z.; RYNDICH, N.A.; KUCHINKA, M.Yu.; ANDRIYENK., S.S.

Thermomechanical properties of cord made from polycaprolactam.
Khim.volok. no.2:23-25 '62. (MIRA 15:4)

1. Kiyevskiy gosudarstvennyy universitet im. Shevchenko.
(Textile fibers, Synthetic) (Azepinone)

GAL'PERIN, A.J., kand. tekhn. nauk; SLAVOV, V.I., kand. tekhn. nauk;
ANDRIYENKO, V.K., inzh.

Some problems in the calculation of pipelaying machinery.
Trudy VNIIST no.15:200-251 '63.

(MIRA 17:11)

GAL'PERIN, A.I., Zemd. tekhn. nauk; ABRAHAMOV, I.A., Inzh.

Pipe bending by internal hydrostatic pressure. Trudy VNIIST no.14:
337-344 '63. (MIRA 17:11)

L 17891-65 EWT(1)/EWA(h) Feb ASD(a)-5/AFETR/ESD(t)

ACCESSION NR: AP5000373

S/0108/64/019/011/0037/0041

AUTHOR: Volkov, V. M. (Active member); Andriyenko, V. F. (Active member) ^B

TITLE: Obtaining a log-magnitude diagram in a radio-pulse amplifier by
cathodic detection ₂₅

SOURCE: Radiotekhnika, v. 19, no. 11, 1964, 37-41

TOPIC TAGS: log magnitude diagram, cathodic detection, amplifier

ABSTRACT: A selective-amplifier circuit with a series combination of voltages taken from stage outputs and a cathodic detection is analyzed; the circuit has an accurate log-magnitude diagram (LMD). Each stage amplifies the r-f voltage, applies it to the next stage, and contributes to the video-pulse output voltage. The latter automatically controls the stage r-f gain when the signal increases. Tubes (6Zh1B, 6Zh1P) with a short anode-grid characteristic are recommended. To prevent self-excitation and to ensure accurate LMD, special decoupling electron-

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L 17891-65

ACCESSION NR: AP5000373

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tube stages are introduced. An analytico-graphical method for calculating such amplifiers is suggested on the basis of tube-characteristic approximations. Numerical examples illustrate the method. Orig. art. has: 6 figures and 6 formulas.

ASSOCIATION: Nauchno-tehnicheskoye obshchestvo radiotekhniki i elektrosvyazi
(Scientific and Technical Society of Radio Engineering and Electrocommunication)

SUBMITTED: 05Nov62

ENCL: 00

SUB CODE: NG, EC

NO REF SOV: 004

OTHER: 001

Card 2/2

SHATILOV, V.A., kand.tekhn.nauk; ANDRIYENKO, V.I., inzh.; PANKOV, V.V., inzh.

Control of formation by means of preliminary moistening of the
coal block. Ugol' Ukr. no.6:13-14 Je '50. (MIRA 13:7)

1. Luganskoye otdeleniye Makeyevskogo nauchno-issledovatel'skogo
instituta po bezopasnosti gornyykh rabot.
(Mine dusts)

ANDRIYENKO, V.N.

Rail manipulator. Biul. TSIICHM no.2:46 '61.
(Rolling mills--Equipment and supplies)
(Materials handling)

(MIRA 14:9)

CHUBUK, S.Ye.; SHAPOVAL, S.I.; ANDRIYENKO, V.V.

Capron parts of the PA-1 and PA-2 automatic stock waterer.
Trakt. 1 sel'khozmasb. no.8:45 Ag '65. (MIRA 18:10)

1. Sovkhoz imeni K. Libknekhta Dnepropetrovskoy oblasti.

SHAPOVAL, S.I.; ANDRIYENKO, V.V. [Andriienko, V.V.], mekhanik

TSNK-2 operates safely. Mekh. sil'. hosp. 14 no.9:26 S '63.
(MIRA 17:1)

1. Glavnyy inzh. sovkhoza im. Karla Libknekhta Krivorozhskogo tresta ovoshchnykh i molochnykh sovkhozov (for Shapoval).
2. Sovkhoz im. Karla Libknekhta Krivorozhskogo tresta ovoshchnykh i molochnykh sovkhozov (for Andriyenko).

ANDRIYENKO, Ye. K.

Report of the 54th session of the Stalino Society of Traumatologists
and Orthopedists. Ortop., travm. i protez. 22 no. 8:87-88 Ag '61.
(MIRA 14:12)

(STALINO...ORTHOPEDIC SOCIETIES)

SHTUTIN, A.Ya., kand.med.nauk (Donetsk 50, Universitetskaya ul., d.55, kv.39);
ANDRIYENKO, Ye.K.

Surgical treatment of clavicular dislocations. Ortop., travm. i
protez. 25 no.7:55 JI '64. (MIRA 18:8)

1. Iz kafedry ortopedii i travmatologii (zav. - prof. M.V.
Khovenko) Donetskogo meditsinskogo instituta imeni Gor'kogo
(rektor - prof. A.M.Ganichkin) i Donetskogo instituta travmatologii
i ortopedii (dir. - starshiy nauchnyy sotrudnik T.A.Revenko).

S/181/62/004/008/041/041
B108/B102

AUTHORS: Andriyesh, A. M., Kolomiyets, B. T., and Nazarova, T. F.

TITLE: Effect of iodine and germanium admixtures on the spectral distribution of the photoconductive effect in vitreous TlAsSe_2

PERIODICAL: Fizika tverdogo tela, v. 4, no. 8, 1962, 2286 - 2288

TEXT: The effect of iodine (up to 6.2 at-%) and germanium (up to 35 at-%) admixtures on the spectral distribution of the photoconductive effect and on the conductivity of vitreous TlAsSe_2 ($\text{Tl}_2\text{SeAs}_2\text{Se}_3$) was studied. Both iodine and germanium shift the maximum of photosensitivity to shorter wavelengths and increase conductivity. The activation energy increases, too. Germanium also increased the softening temperature of TlAsSe_2 , which is attributed to the formation of covalent bonds between the chains and to an increase in bonding strength of the chains along which the carriers move. This effect was not observed when iodine was introduced. There are 2 figures.

Card 1/2

Effect of iodine ...

S/181/62/004/008/041/041
B108/B102

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR
Leningrad (Physicotechnical Institute imeni A. F. Ioffe AS
USSR Leningrad)

SUBMITTED: April 29, 1962 (initially),
May 10, 1962 (after revision)

Card 2/2

L 16700-65 EWP()/EWT(m)/EWP(b) Pq-4 ESD(t)/SSD/AFWL/ASD(a)-5 WH
ACCESSION NR: AR5000792 S/0058/64/000/010/E011/E011

SOURCE: Ref. zh. Fizika, Abs. 10E81

AUTHORS: Andriyesh, A. M.

TITLE: Electric conductivity and thermal emf of the system of glass like materials $Tl_2SeAs_2(Se, Te)_3$

CITED SOURCE: Tr. 3-y konferentsii molodykh uchenykh Moldavii. Yestestv.-tekhn. n. Vyp. 1, Kishinev, Kartya Moldovenyaske, 1964, 6

TOPIC TAGS: glass conductivity, glass property, thermal emf, temperature dependence, band theory, semiconductor, carrier mobility, chalcogen

TRANSLATION: Results are presented of an investigation of the temperature dependence of the electric conductivity and thermal emf of the system of glass-like materials $Tl_2SeAs_2(Se, Te)_3$. By applying to glass-like semiconductors the notions of band theory the author estimated the ratio of the mobilities and the effective masses of the carriers in materials of the investigated system. It is

Cord_{1/2}

Z 16700-65

ACCESSION NR: AR 5000792

shown that a change in the composition of the investigated chalcogen glasses by increasing or decreasing the contents of the individual components leads to a monotonic change in the electric parameters.

SUB CODE: MT, SS

ENCL: 00

Card 2/2

L 00001-66 EWP(e)/EWT(m)/EWP(1)/EWP(b) WH

ACCESSION NR: AR5005457

S/0275/64/000/012/B007/B007

539.293:546.683'23'19'24

SOURCE: Ref. zh. Elektronika i yeye primeneniye. Svyodnyy tom, Abs. 12B41

AUTHOR: Andriyesh, A. M.; Kolomiyets, B. T.

TITLE: Mobility and effective mass of current carriers in a vitreous $Tl_2SeAs_2Te_3$

CITED SOURCE: Sb. Issled. po poluprovodnikam. Kishinev, Kartya Moldovenyaske, 1964, 57-63

TOPIC TAGS: carrier mobility, carrier effective mass, semiconductor, $Tl_2SeAs_2Te_3$ semiconductor

TRANSLATION: The results of measuring the electric conductivity and thermoelectric emf of vitreous $Tl_2SeAs_2Te_3$ as a function of temperature are reported. This alloy was synthesized from its components in vacuum quartz vials. Microstructure and microhardness tests showed that the alloy was homogeneous. The alloy conductivity measured at room temperature was 2.5×10^{-8} per ohm-cm. With the specimens cooled to liquid-nitrogen temperature, the dark conductivity fell off exponentially. Within the entire temperature range, only one slope 0.67 ev was

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L 00001-66

ACCESSION NR: AR5005457

observed. At room temperature, the alloy has a considerable thermo-emf (930 microv/degree). The thermo-emf direction corresponds to the hole mechanism of conductivity. The thermo-emf grows with temperature: it is 1550 microv/degree at 100C. The thermo-emf vs. reciprocal-temperature curve represents a straight line at a slope of 0.26 ev. An opinion is offered that the above alloy is an intrinsic semiconductor. The carrier mobility ratio is determined from the $\alpha = f\left(\frac{1}{T}\right)$ slope and the forbidden-band width by means of the Gubanov theory. The mobility ratio is 0.13 which means that the hole mobility is higher by one order than the electron mobility. The hole effective mass of the alloy, assuming only phonon dispersion, is $30 m_0$, where m_0 is the free-electron mass. It is believed that such a high effective mass is in agreement with a low carrier mobility ($100 \text{ cm}^2/\text{v-sec}$). Bibliography: 9 titles

SUB CODE: GP, EC

ENCL: 00

Card 2/2

L 12652-65 EWT(m)/EWP(h) AS(mp)-2 RDW/JD/MLK

ACCESSION NR: AT4044563

S/0000/64/000/000/0057/0063

AUTHOR: Andriyesh, A.M., Kolomiyets, B.T.

TITLE: The problem of current carrier mobility and effective mass in vitreous Tl
sub 2 SeAs sub 2 Te sub 3

SOURCE: AN MolSSI²¹. Institut fiziki i matematiki. Issledovaniya po poluprovodnikam;
novy*ye poluprovodnikov*ye materialy* (semiconductor research; new semiconductor
materials). Kishinev, Gos. izd-vo Kartya Moldovenyaske, 1964, 67-68

TOPIC TAGS: current carrier mobility, semiconductor conductivity, thermoelectromotive
force, thallium semiconductor

ABSTRACT: A special amplifier, patterned after Yemel'yanenko and Trishin's device for
measuring semiconductor electrical properties, was used in a study of the temperature
dependence (from +70C down to -110C) of the electrical conductivity and thermal emf
in $Tl_2SeAs_2Te_3$ alloy prepared from the individual components in quartz vacuum ampoules
and proven to be homogeneous by tests of x-ray microstructure, microhardness, and
electrical conductivity. The electrical conductivity of the 3 x 3 x 100 mm samples with
a 10-20C end-to-end temperature gradient was found to be $2.5 \times 10^{-3} \text{ ohm}^{-1}\text{cm}^{-1}$ at room
Card 1/2

L 12652-65

ACCESSION NR: AT4044563

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temperature, decreasing exponentially with a decrease in temperature down to that of liquid nitrogen. The $930 \mu\text{V}/\text{degree}$ emf, found at room temperature, corresponds to a hole mechanism of conductivity and was found to be an inverse function of temperature, reaching a value of $1550 \mu\text{V}/\text{degree}$ at -100°C . The effective mass of the holes was of the order of $30 m_0$, and the mobility of the holes was found to be roughly one order of magnitude greater than that of the electrons. The temperature dependence of both the emf and electrical conductivity are diagrammed. "The authors thank A. A. Vaypolin, who performed the x-ray structural analysis, V. P. Shilo, who performed the microstructural analysis, and O. V. Yemel'yanenko, who gave valuable advice." Orig. art. has: 2 figures and 5 formulas.

ASSOCIATION: Institut fiziki i matematiki AN Mol SSR (Institute of Physics and Mathematics, AN Mol. SSR)

SUBMITTED: 13Dec69

ENCL: 00

SUB CODE: IC, EC

NO REF SOV: 009

OTHER: 000

2/2

Card

L 17972-63

EWf(q)/EWf(m)/BDS

AFfTC/ASD

Pq-4

WH/JD/RDW

ACCESSION NR: AP3000631

S/0181/63/005/005/1461/1465

AUTHORS: Andriyesh, A. M.; Kolomiyets, B. T.

TITLE: Local levels in glassy Tl₂SeAs₂Te₃ 15

SOURCE: Fizika tverdogo tela, v. 5, no. 5, 1963, 1461-1465

TOPIC TAGS: semiconductor, forbidden band, Tl₂SeAs₂Te₃, dark conductivity

ABSTRACT: The authors describe the effect of preserving high dark conductivity as a result of short-period illumination of samples of glassy Tl₂SeAs₂Te₃ at low temperatures, and they present results of measuring thermoelectric currents in these samples. The method of preparing samples and testing them for homogeneity is the same as proposed by the same authors in "Novyye issledovaniya po poluprovodnikovym materialam," (Izd. "Kartea moldovenyaske," Kishinev, 1963). The samples were placed in a glass flask which was first evacuated and filled with nitrogen. Temperatures were measured by immersing the flask in a Dewar flask with liquid nitrogen and also by means of an electrical furnace placed within the flask. An EMU-3A electrometric amplifier and an EPPU-51M4 automatic recorder were employed to measure the current. The authors found that specimens cooled to a low temperature and then illuminated for a short period showed a much higher dark conductivity after cessation of

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L 17972-63

ACCESSION NR: AP3000631

illumination than they possessed before the illumination. This increased dark conductivity did not alter significantly after a rather extended time (at least an hour). The phenomenon is fully reversible. Curves showing dependence of dark conductivity on temperature have a single slope for specimens not previously exposed to illumination, but show a change in slope for specimens previously illuminated. These experiments are explained by the existence of current-carrier traps in the forbidden band. The authors conclude that local levels occur in the forbidden band of such semiconductors. Orig. art. has: 4 figures and 1 formula.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSR, Leningrad
(Physical and Technical Institute, Academy of Sciences, SSSR)

SUBMITTED: 16Jan63

DATE ACQ: 11Jun63

ENCL: 00

SUB CODE: PH

NO REF SOV: 005

OTHER: 003

Card 2/2

ACCESSION NR: AP4043392

S/0181/64/006/008/2539/2541

AUTHORS: Sobolev, V. V.; Andriyesh, A. M.; Sy*rbu, N. N.; Shumov, S. D.

TITLE: Reflection spectra of crystals of groups II-IV and III-VI

SOURCE: Fizika tverdogo tela, v. 6, no. 8, 1964, 2539-2541

TOPIC TAGS: indium antimonide, cadmium alloy, group II element, group III element, group IV element, group VI element, reflected radiation spectrum, band spectrum

ABSTRACT: This investigation was undertaken in connection with the great interest which is attached to compounds of the CdSb and In_2Te_3 type. The energy structure of crystals of groups II--V and III--VI was investigated at 290K in the region 1--6 eV. The reflection spectra of polished and etched crystals CdSb, ZnSb, 56% ZnSb-44% CdSb, Cd_4Sb_3 , Zn_3Sb_2 , Zn_4Sb_3 , In_2Se_3 , In_2Te_3 , CdIn_2Se_4 , Ga_2Se_3 , Ga_2Te_3 ,

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ACCESSION NR: AP4043392

GaSe, and GaTe were investigated. The similarities and differences between the various spectra are briefly discussed. It is concluded that in view of the similarity of their reflection spectra, the crystals CdSb, ZnSb, and Zn_3Sb_2 , Zn_4Sb_3 , and Cd_4Sb_3 have similar energy-band structures and nearly equal transition energies. The general conclusion is that the compounds of groups II--V and III--VI are close to compounds of groups III--V and II--VI not only in lattice structure but also in the type of bond and energy-band structure. Orig. art. has: 1 figure.

ASSOCIATION: Institut fiziki i matematiki AN MoldSSR, Kishinev
(Institute of Physics and Mathematics, AN MoldSSR)

SUBMITTED: 23Jan64

ENCL: 01

SUB CODE: SS

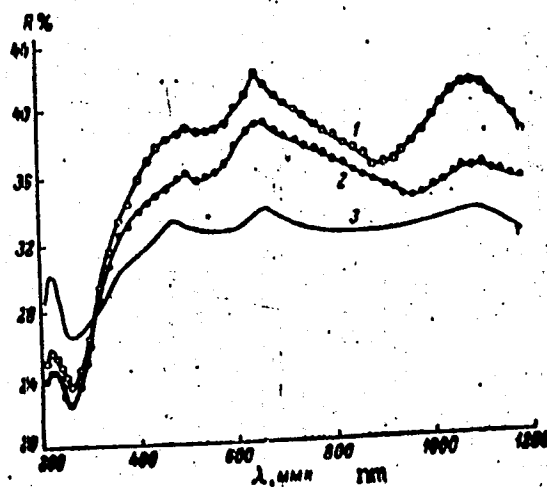
NR REF SOV: 003

OTHER: 001

Card 2/3

ACCESSION NR: AP4043392

ENCLOSURE: 01



Reflection spectra at $T = 290^\circ\text{K}$ in the range of 1-6 eV; 1 - SnSb, 2 - CdSb, 3 - In₂Te₃

Card 3/3

L 11997-65 EWT(m)/ENP(e)/ENP(b) Pq-4 ASD(a)-S/AFWL/AFETR/SSD RDW/JD/WH
S/0181/64/006/011/3317/3320

ACCESSION NR: AP4048406

AUTHORS: Andriyesh, A. M.; Kolomiyets, B. T.

TITLE: Electrical conductivity and thermal emf of glassy semicon-
ductor of the $Tl_2Se.As_2(Se, Te)_3$ system

SOURCE: Fizika tverdogo tela, v. 6, no. 11, 1964, 3317-3320

TOPIC TAGS: electric conductivity, thermal emf, glassy semiconductor, carrier mobility

ABSTRACT: The temperatures dependences of the electrical conductivity and thermal emf of materials of the system $Tl_2Se.As_2(Se, Te)_3$ were reported earlier by the present authors ["Issledovaniya po poluprovodnikam" (Research on Semiconductors), Izd. Karta Moldovenyaske, Kishinev, 1964]; the present paper gives the results for five other compositions of the $Tl_2Se.As_2(Se, Te)_3$ system between 400 and 100K. On increase of the tellurium content the room-temperature electrical

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conductivity rose exponentially from 10^{-7} to $3 \times 10^{-3} \text{ ohm}^{-1}\text{cm}^{-1}$.⁰ When the selenium content was increased the activation energy of carriers increased linearly from 0.67 eV for $\text{Tl}_2\text{Se.As}_2\text{Te}_3$ to 1.2 eV for $\text{Tl}_2\text{Se.As}_2\text{Se}_3$. The semiconducting glasses exhibited considerable thermal emf. For example the room-temperature thermal emf of the glassy alloy $\text{Tl}_2\text{Se.As}_2\text{Se}_3$ reached 1700 $\mu\text{V/deg}$. When the tellurium content was increased, the emf decreased smoothly and amounted to about 950 $\mu\text{V/deg}$ for $\text{Tl}_2\text{Se.As}_2\text{Te}_3$. An investigation of the temperature dependence of the thermal emf showed that over the whole range of temperatures all the glassy alloys had p-type conduction. When the temperature increased, the thermal emf decreased. The nature of the dependence indicated intrinsic conduction. The data on the temperature dependence of the electrical conductivity and thermal emf were used to determine the ratio of the carrier mobilities by the same method as for crystalline semiconductors in the intrinsic conduction region. The ratio for $\text{Tl}_2\text{Se.As}_2\text{Te}_3$ was of the order of 0.1, i.e., the hole mobility was approximately an order of magnitude greater than the electron mobility. On increase of the selenium con-

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tent, the mobility ratio tended to decrease. The hole mobility was found to vary weakly with the composition. The nature of the dependence of the forbidden bandwidth and the associated parameters on the selenium and tellurium content in the investigated glassy materials was in good agreement with the hypothesis of N. A. Gorynuova and one of the present authors [Abstracter's note: no reference given] that the covalent bonds in glasses became metallic when light components were replaced with heavy ones. "The authors thank G. S. Frolova for help in these measurements." Orig. art. has: 5 figures and 1 formula.

ASSOCIATION: Fiziko-tehnicheskiy institut im. A. M. Ioffe, AN SSSR, Leningrad (Physicotechnical Institute, AN SSSR)

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SUB CODE: SS, EM

NR REF SOV: 005

OTHER: 002

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L 6806-65 EWT(1)/EWG(k)/EWP(m)/EPR/EEC(b)-2/EWP(q)/EWP(b) Pz-6/Pq-4/Pr-4
 IJF(c)/ASD(a)-5/AFWL/AJ(h)-2/ESD(t)/RAEM(t) RDW/JT/AT/WH
 ACCESSION NR: AP4044638 S/0048/64/028/008/1291/1292

AUTHOR: Andriyesh, A.M.; Kolomiyets, B.T.

TITLE: Thermostimulated current in vitreous $Tl_2SeAs_2Te_3$ /Report, Third All-Union
 Conference on Semiconductor Compounds held in Kishinev 16-21 Sept 1963/

SOURCE: AN SSSR. Izv. Seriya fizicheskaya, v.28, no.8, 1964, 1291-1292

TOPIC TAGS: semiconductor, semiconductor conductivity, photoconductor, activated
 energy, tellurium compound, arsenic compound, selenium compound, thallium compound

ABSTRACT: The exposure effect, discovered many years ago in crystalline selenium
 by P.V.Sharavskiy (Zh.eksp.i teor.fiz.4,146,1934), is described briefly as it ap-
 pears in vitreous $Tl_2SeAs_2Te_3$ (A.M.Andriyesh, Leningr.gos.ped.in-t im.A.I.Gertsena,
 1963). If this material is exposed briefly to light at a low temperature, the dark
 conductivity does not return to its former value but remains greater than before.
 This enhanced conductivity persists for "a long time" if the temperature is not per-
 mitted to rise. The enhanced conductivity is temperature dependent with an activa-
 tion energy of 0.25-0.3 eV, whereas the activation energy for the intrinsic conduc-
 tivity of this material is 0.67 eV. The magnitude of the enhanced conductivity is

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proportional to L^n , where L is the exposure and $n = 0.5$ to 0.65 . These phenomena are presumably due to the existence in the vitreous material of local centers which trap the carriers produced by the illumination and thus give rise to impurity type conduction. The increase in the enhanced conductivity with exposure indicates that the concentration of trapped carriers is proportional to the concentration of free ones. The authors conclude that the number of trapping centers is very large and that saturation was not reached in their experiments. The thermostimulated current in $Tl_2SeAs_2Te_3$ was measured at two rates of temperature rise: 0.06 and 0.13 degrees/sec. Each curve showed a maximum near $-130^\circ C$. From the position and magnitude of the maximum it was calculated that the trapped carriers were located some 0.25 eV below the conduction band. This is in good agreement with the activation energy obtained from the temperature dependence of the enhanced conductivity. Orig.art.has: 4 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut im.A.P.Ioffe AN SSSR (Physico-technical Institute, AN SSSR); Institut fiziki i matematiki Akademii nauk MoldSSR (Institute of Physics and Mathematics, Academy of Sciences, Moldavian SSR)

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SUB CODE: SS, EM

NR REF SOV: 003

OTHER:OOO

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ACC NR: AT700382

SOURCE CODE: UR/0000/66/000/000/0212/0216

AUTHOR: Andriyesh, A. M.; Sobolev, V. V.

ORG: none

TITLE: Optical reflection spectra of chalcogenides of arsenic

SOURCE: AN BSSR. Institut fiziki tverdogo tela i poluprovodnikov. Khimicheskaya svyaz' v poluprovodnikakh i termodinamika (Chemical bond in semiconductors and thermodynamics). Minsk, Nauka i tekhnika, 1966, 212-216

TOPIC TAGS: arsenic compound, light reflection, glass property, optic spectrum

ABSTRACT: The purpose of the investigation was to study the change in the energy levels, in the nature and magnitude of interatomic interaction forces when compounds like As_2S_3 , As_2Se_3 , or As_2Te_3 are transformed from the crystalline state into the vitreous state. To this end the authors used spectrometers (SF-4 and SF-5) to investigate in the 1 - 6 eV region and at $T = 295K$ the reflection spectra of As_2S_3 (in the form of cleaved single crystals, glass with surface obtained by fracture, mechanically polished glass, chemically polished glass, and aged glass synthesized five years ago), and As_2Te_3 (in the form of a mechanically polished polycrystal, a chemically polished polycrystal, and glass). Plots of the reflection spectra are presented and the various irregularities observed in the spectra of the different samples are listed and interpreted. Comparison of the reflection spectra of the crystals and glasses of the different chalcogenides leads to the following conclusions: In the

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As₂S₃ spectrum, the long-wave and short-wave maxima of the auripigment are close in position to the main peak and to the weak two maxima of artificially aged single crystal; the glass exhibits in addition to the "crystal" peaks also one structureless broad band in the same region of the spectrum. In the As₂Se₃ crystal, the main band is at 340 nm, whereas in the glass it is at 380 - 400 nm. The appearance of a peak at 340 nm in "aged" glass is due to its crystallization during the five years elapsed from the synthesis of the glass. In As₂Te₃, no difference is observed between the reflection of the glasses and crystals. From comparison with theoretical studies it is concluded that the maxima observed in the reflection of the single-crystal As₂S₃ and As₂Se₃ are due to direct interband transitions. Orig. art. has: 1 figure.

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ANDRIYEVA, I. I.

EXCERPTA MEDICA Sec 5 Vol 12/10 General Path Oct 59

3220. THE NERVOUS SYSTEM OF THE ADRENAL GLANDS AND ITS CHANGES
IN HYPERTENSIVE VASCULAR DISEASE (Russian text) - Andrieva
M. P. - ARKH. PATOL. 1959, 21/3 (21-28) Illus. 5

An examination was made of the nervous system of the adrenal glands of 12 patients with hypertension in various stages of the disease. If the kidneys were involved (nephrogenic stage) the changes in the nervous apparatus of the adrenal glands were marked both in the medulla and cortex. The changes had the nature of reactive processes. Only in one subject was mass destruction of the nerve fibres and the final apparatus observed as early as in the transitory stage. The changes in the nervous system are supposed to be of secondary nature and to have no significance for the development of the hypertension. No parallelism was found between severe general changes in the adrenal glands (severe haemorrhages, necroses, marked fibrosis) and damage of the nervous apparatus.

Brandt - Berlin (V, 3, 18).